Trend Watch

Treatment of Bipolar Disorder

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ABSTRACT

In this article, we investigate the range of treatments prescribed for bipolar disorder. Our analysis shows that, while a large portion of patients is treated by a single mechanism of action (44%), an equally sizable group of patients receives two or more drug classes (56%) to treat the disorder. From a therapeutic class perspective, 71 percent of patients with bipolar disorder receive an atypical antipsychotic, 53 percent receive a mood stabilizer, and 30 percent receive an antidepressant. While antipsychotics and mood stabilizers represent the vast majority of bipolar disorder monotherapy (90%), antidepressants are more commonly seen as part of a combination treatment.

KEY WORDS

bipolar disorder, mood stabilizer, sleep agent, antianxiety, antipsychotic, monotherapy, combination therapy

INTRODUCTION

Anecdotally, we know that physicians leverage multiple treatment approaches to meet the needs of their patients with bipolar disorder. Treatment approaches range from monotherapy with an atypical antipsychotic to multiclass regimens, including antipsychotics, mood stabilizers, and antidepressants. In this article, we seek to understand the current bipolar disorder treatment environment by establishing bipolar disorder demographics in the United States, and investigate the range of treatment regimens used in patients with bipolar disorder.

METHODS

We obtained data on product treatment regimen from SDI/Verispan's Prescription Drug & Diagnosis Audit (PDDA) database from August 2008 to July 2009 for patients with bipolar disorder as defined by ICD-9 diagnosis codes 296.4-296.8. PDDA captures data on disease states and associated therapy from 3,100 office-based physicians representing 29 specialties across the US.

RESULTS

According to practice data from SDI/Verispan, bipolar disorder affects both women and men equally and generally presents in patients between the ages of 18 and 54. Figure 1 represents the number of products patients are typically prescribed to treat the disorder. According to the figure,

monotherapy represents 44 percent of treatments, while combination treatment regimens of 2, 3, 4, and 5 medications make up the remaining 56 percent of treatments. However, treatment regimens consisting of four or more medications are rare (approximately 2%).

The most common regimens for treatment of bipolar disorder are mood stabilizer and antipsychotic monotherapy, prescribed 23 percent and 17 percent of the time, respectively. Additionally, the combination of a mood stabilizer and antipsychotic is prescribed to 13 percent of patients being treated for bipolar disorder. The remaining 50 percent of prescribed regimens are most commonly combination therapies, which consist of one or both of the standard monotherpy classes along with an antidepressant or other central nervous system (CNS) agent.

Figure 2 represents the prevalence of products used in bipolar regimens by therapeutic class. As you can see, 71 percent of treatment regimen uses include a mood stabilizer, 53 percent include an antipsychotic, and 30 percent include an antidepressant. At least 10 percent of bipolar regimen uses include other agents, such as antidepressants, antianxiety medications, or sleep agents.

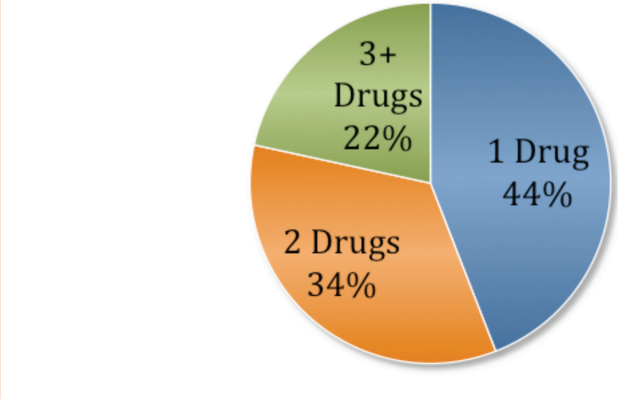

FIGURE 1. Number of products per regimen used to treat bipolar disorder

Source: SDI/Verispan PDDA, Diagnosis 296.4-269.8, Aug 2008 to July 2009

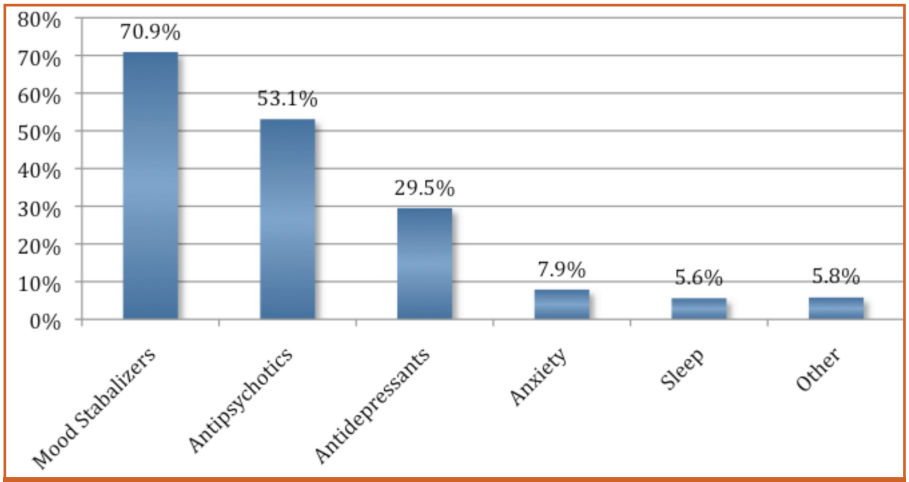

FIGURE 2. Pharmaceutical classes prescribed to treat bipolar disorder.
Note: Mood stabalizers include antiepileptics and lithium, sleep includes sleep agents and trazodone, anxiety includes benzodiazepines and buspirone.
Source: SDI/Verispan PDDA, Diagnosis 296.4-269.8, Aug 2008 to July 2009

LIMITATION OF DATA

These data are representative of office-based physicians in the United States, many of which are affiliated with medical centers, and may not include data from psychiatric hospitals.

EXPERT COMMENTARY

by Roger McIntyre, MD, FRCPC

The number of agents approved by the United States Food and Drug Administration (FDA) for various phases of bipolar disorder has increased significantly and rapidly during the past decade. For example, more agents have been approved for bipolar disorder in the past decade than the previous five decades combined. Contemporaneous with the development of new treatment options for bipolar disorder have been several reports describing the rising prevalence of polypharmacy in patients receiving treatment for this condition. Taken together, the majority of individuals with bipolar disorder receiving care in specialty-care settings do not achieve and sustain symptomatic, syndromal, and functional recovery with single-agent pharmacotherapy.

Against this background, the results of this analysis largely cohere with several other reports characterizing medication usage in bipolar disorder in both clinical and epidemiological samples. It is not surprising that the most frequently prescribed class of agents was mood stabilizers at 71 percent. It is

interesting to see that the majority of individuals with bipolar disorder are receiving an antipsychotic agent. This perhaps could be expected in light of the extensive development and widespread marketing of second-generation antipsychotics as monotherapy and as adjuncts to conventional mood stabilizers for the treatment and prevention of bipolar mania and depression (admittedly with only two agents approved for acute bipolar depression—quetiapine, olanzapine-fluoxetine combination).

The data herein indicate that 30 percent of individuals with bipolar disorder are receiving a conventional unimodal antidepressant (CUA). For practitioners with less experience treating bipolar patients, this may come as a surprise in light of the fact that no CUA is FDA-approved for the acute or maintenance treatment of bipolar depression. Busy practitioners will be perhaps less surprised by this outcome given the widespread usage of CUAs in real-world patients with bipolar disorder and the insufficient outcome obtained with most other agents. It was reassuring that the use of CUAs was most often as part of a combination treatment. This pattern of prescribing would cohere with expert consensus wherein the use of a CUA in bipolar I disorder should be in combination with a conventional mood stabilizer or atypical antipsychotic (there is dissensus among experts as to the role of CUA monotherapy in individuals with bipolar II disorder or other "softer" bipolar spectrum conditions). It is notable that the coprescription of a CUA with another mood-stabilizing agent in this database is discrepant with other lines of data, which indicate that CUA monotherapy, despite being discordant with evidence-based medicine and expert opinion, is a common treatment strategy in bipolar individuals.

This data shows that 44 percent of patients were receiving a monotherapy regimen while 56 percent were receiving polytherapy. I found the rate of monotherapy to be surprisingly high, suggesting fewer tertiary patients in the data cohort (we do not have detailed information related to the individuals enrolled in this database). Moreover, as this is a cross-sectional analysis, we also do not have within-group information related to changes in monotherapy/polytherapy during the past decade. It would also be interesting to include in subsequent analysis a description of nonpsychotropic agents used in this patient population. For example, we know that most bipolar individuals utilizing healthcare services are affected by a comorbid medical condition. The presence of comorbid medical (and psychiatric) conditions increases the likelihood for polypharmacy and introduces a host of concerns related to cost, adverse event burden, drug interactions, safety, and treatment adherence.

Practitioners diagnosing and treating individuals with bipolar disorder should embrace principles of chronic disease management that includes, but is not limited to, the use of evidence-based treatments. The majority of individuals receiving care in tertiary and specialty centers will require a polytherapeutic regimen. Unfortunately, the evidentiary base informing decisions regarding polytherapy is insufficient, introducing variability in prescribing patterns and patient outcome. The challenge for practitioners and patients is to identify a personalized and optimal combination of agents (and evidence-based psychotherapies) that sufficiently eliminate symptoms and increase the probability for full functional recovery.

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